

FOREST STAND

PS1 - TULIP POPLAR ASSOCIATION

PLANTING SPECIFICATIONS AND NOTES

SITE PREPARATION AND SOILS

1. PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS, IF NECESSARY.
2. DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
3. SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
4. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
5. ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

1. FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
2. FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
3. PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
4. UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.

PLANT INSTALLATION

1. THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
2. PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
3. CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.

DEVELOPER'S/OWNER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE IN ACCORDANCE TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 10/10/13

DATE: 10/10/13

4. CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS ENIRCLE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED. J-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
5. FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
6. FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
7. AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
8. NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

FERTILIZING

1. DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
2. NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
3. IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

1. ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD
2. ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS
3. VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.
4. REMOVE THICK BRANCHES (CRUSPING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
5. REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
6. A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

SUPERVISION

ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER "QUALIFIED PROFESSIONAL" AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.19.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.

MINIMUM LOT SIZE CHART

LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	24,769 SQ.FT.	796 SQ.FT.	23,973 SQ.FT.
3	27,918 SQ.FT.	1,341 SQ.FT.	26,577 SQ.FT.

SOILS CLASSIFICATION:

M: MIXED ALLUVIAL LAND
Mf: (C) MONTAJO AND RELAY SOILS, 15 TO 45 PERCENT SLOPES
Msf: (C) MONTAJO AND RELAY VERY STONEY SILT LOAMS, 25 TO 60 PERCENT SLOPES

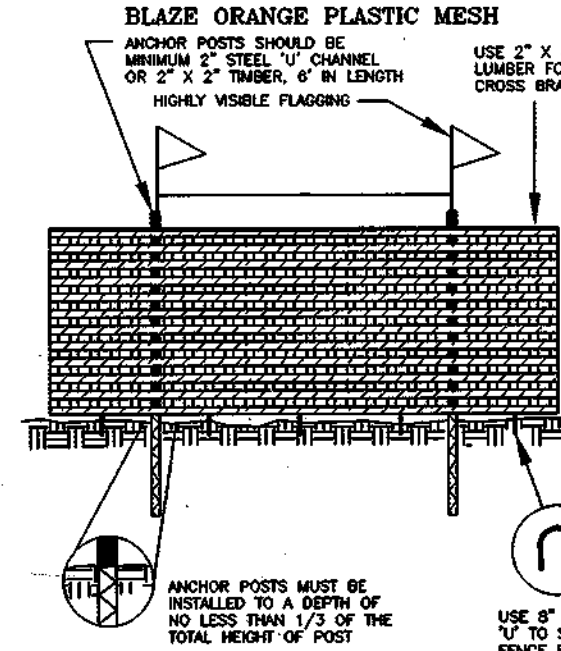
LEGEND

- ▲ FOREST CONSERVATION SIGNAGE
- FOREST CONSERVATION EASEMENT (REFORESTATION)
- EX. PUBLIC 100 YEAR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT
- PROPOSED PAVING
- WETLANDS

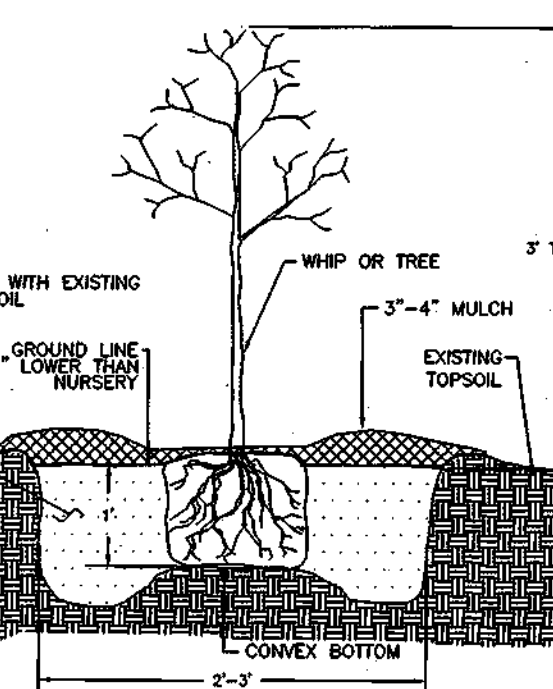
SIGNAGE DETAIL

NOT TO SCALE

PROTECTIVE FENCE DETAIL



LINE	LENGTH	BEARING
W1	35.38	N06°54'10"W
W2	69.41	N06°28'36"E
W3	15.30	N15°16'00"E
W4	11.04	S72°19'44"E
W5	15.28	S10°06'39"E
W6	64.81	S17°04'19"W
W7	39.44	S12°23'53"E
W8	10.25	S89°58'06"E
W9	12.03	S15°11'13"W
W10	30.33	S14°58'12"W
W11	46.36	S06°14'27"E
W12	56.64	S86°17'22"W
W13	8.35	S46°01'04"E
W14	68.72	S89°00'29"W
W15	43.45	N09°07'14"W
W16	17.89	N00°43'00"W
W17	38.49	N06°18'53"E
W18	17.37	S59°48'03"E



TREE PLANTING DETAIL

CONTAINER GROWN

QTY.	SPECIES	SHADE	MOIST.	WET.	MIN.O.C.	SIZE & REMARKS
15	Acer negundo	T	M-W	FAC+	15'	CONT/B & B 1" CALIPER
70	Acer rubrum	VT	D-W	FAC	15'	CONT/B & B 1" CALIPER
25	Cornus florida	VT	D-M	FACU	11'	CONT/B & B 3"-5" HEIGHT
15	Fraxinus floridana	I-MT	M-W	FACW	15'	CONT/B & B 1" CALIPER
25	Lindera benzoin	T	M	FACW	11'	3 GAL. CONT.
25	Nyssa sylvatica	T	M-W	FAC	15'	CONT/B & B 1" CALIPER
40	Platanus occidentalis	MT	M-W	FACW	15'	CONT/B & B 1" CALIPER
20	Ulmus americana	MT	M-W	FAC	15'	CONT/B & B 1" CALIPER
40	Tulip poplar	MT	M-W	FAC	15'	CONT/B & B 1" CALIPER
TOTAL						380 TREES & SHRUBS (200 TREES REQUIRED)

QTY.	SPECIES	SHADE	MOIST.	WET.	MIN.O.C.	SIZE & REMARKS
25	Acer negundo	T	M-W	FAC+	11'	SEEDLING/ANP WITH TREE SHELTER
125	Acer rubrum	VT	D-W	FAC	11'	SEEDLING/ANP WITH TREE SHELTER
40	Cornus florida	VT	D-M	FACU	8'	SEEDLING/ANP WITH TREE SHELTER
25	Fraxinus floridana	I-MT	M-W	FACW	11'	SEEDLING/ANP WITH TREE SHELTER
20	Lindera benzoin	T	M	FACW	8'	1 GAL. CONT.
45	Nyssa sylvatica	T	M-W	FAC	11'	SEEDLING/ANP WITH TREE SHELTER
30	Platanus occidentalis	MT	M-W	FACW	11'	SEEDLING/ANP WITH TREE SHELTER
70	Ulmus americana	MT	M-W	FAC	11'	SEEDLING/ANP WITH TREE SHELTER
TOTAL						380 TREES & SHRUBS (350 TREES REQUIRED)

FOREST CONSERVATION DATA

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

- A. TOTAL TRACT AREA..... = 3.01
- B. AREA WITHIN 100 YEAR FLOODPLAIN..... = 0.80
- C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION..... = 0.00
- D. NET TRACT AREA..... = 2.21

LAND USE CATEGORY:

- A. AFFORESTATION THRESHOLD..... 15% X D = 0.33
- F. CONSERVATION THRESHOLD..... 20% X D = 0.44

EXISTING FOREST COVER:

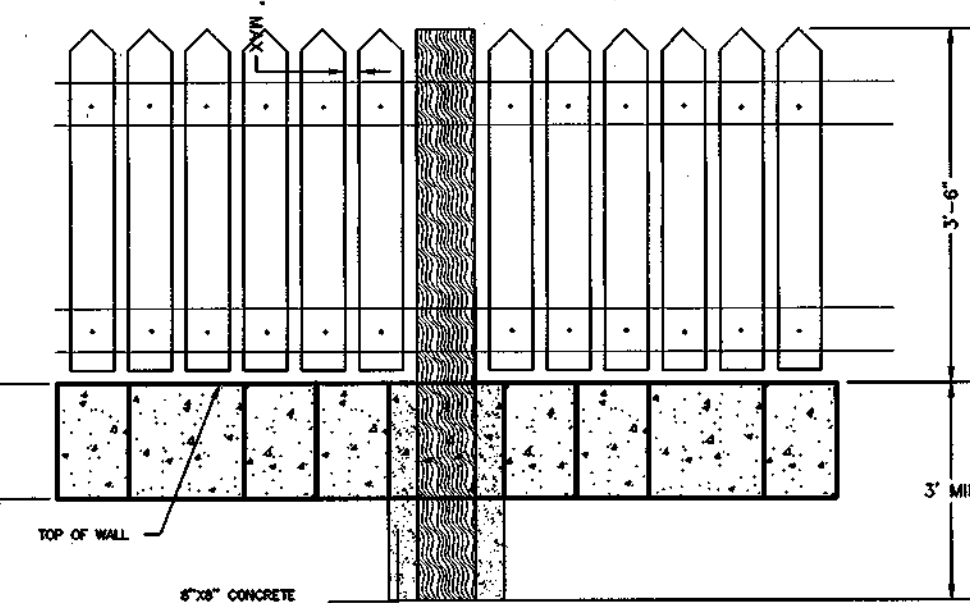
- G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN)..... = 1.34
- H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD..... = 1.01
- I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD..... = 0.90

BREAK EVEN POINT:

- J. FOREST RETENTION ABOVE THE THRESHOLD WITH NO MITIGATION..... = 0.62
- K. CLEARING PERMITTED WITHOUT MITIGATION..... = 0.72
- L. TOTAL AREA OF FOREST TO BE CLEARED..... = 1.34
- M. TOTAL AREA OF FOREST TO BE RETAINED..... = 0.00

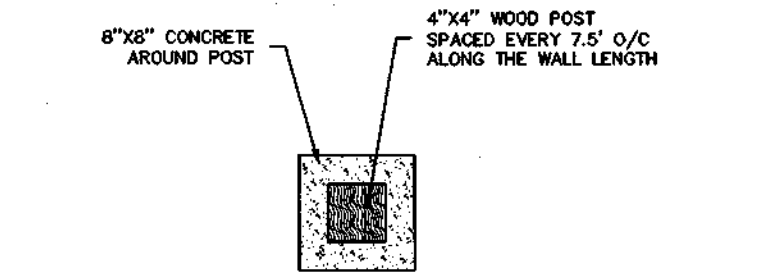
PLANTING REQUIREMENTS:

- N. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD..... = 0.22
- P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD..... = 0.88
- Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD..... = 0.00
- R. TOTAL REFORESTATION REQUIRED..... = 1.11
- S. TOTAL AFFORESTATION REQUIRED..... = 0.00
- T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED..... = 1.11



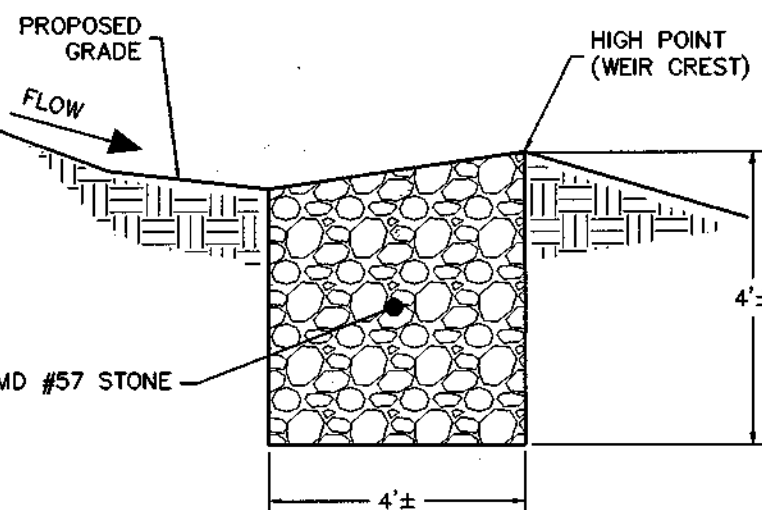
FENCE PROFILE (TYP.)

SCALE: NONE



WOOD POST PLAN

SCALE: NONE



LEVEL SPREADER DETAIL

NTS

SPECIMEN TREES

KEY	SPECIES
ST#1	45' STYCAMORE
ST#2	34' POPLAR
ST#3	31' POPLAR
ST#4	30' POPLAR
ST#5	40' POPLAR
ST#6	42' RED MAPLE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
11	○	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
TOTAL				11 SHADE TREES

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

SCHEDULE A: PERIMETER LANDSCAPED EDGE

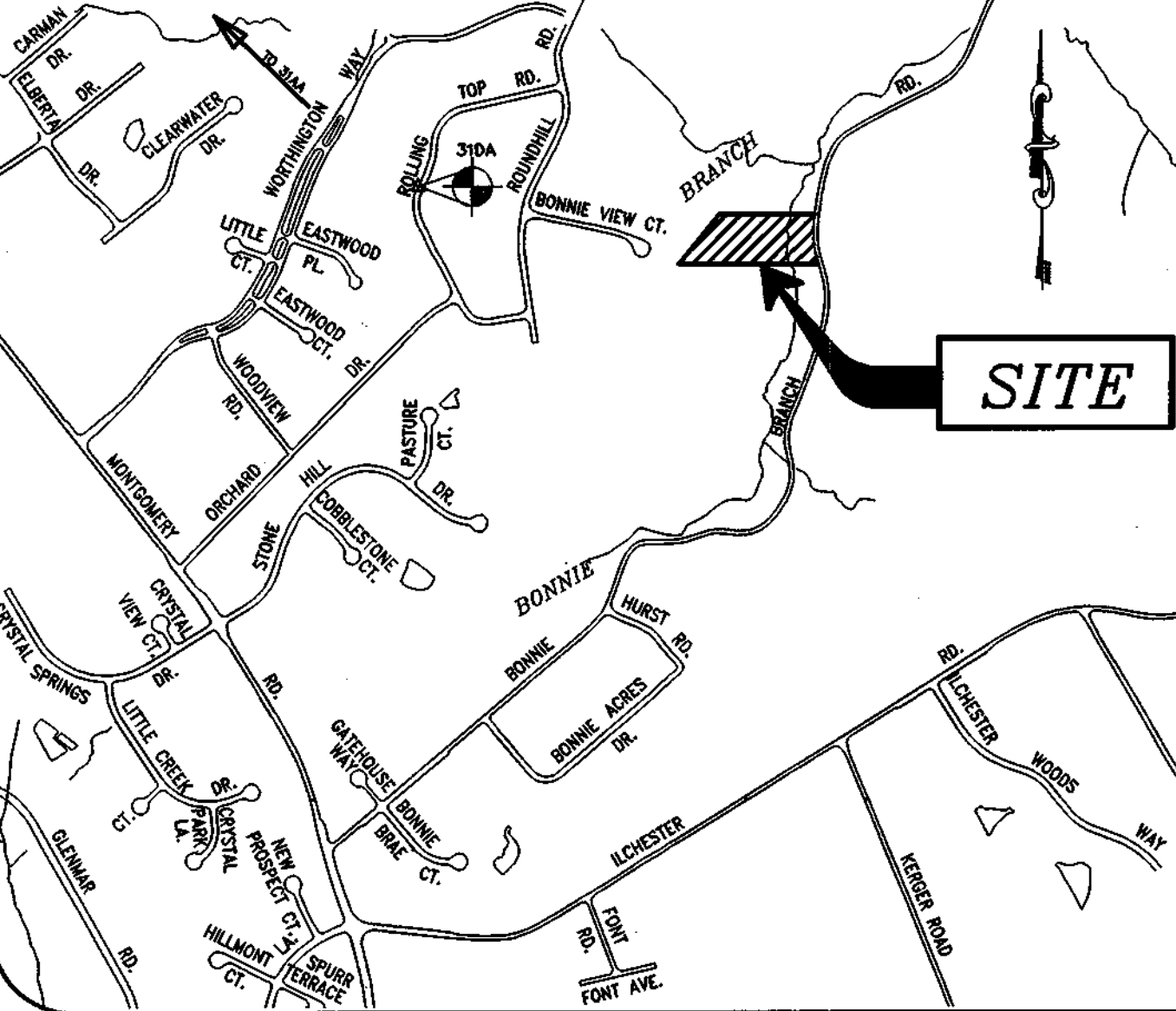
CATEGORY	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	TOTAL
LANDSCAPE TYPE	442.69 LF	313.72 LF	657.08 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, CREDIT FOR EX. TREES TO REMAIN 146 LF.	YES, CREDIT FOR EX. TREES TO REMAIN 313.72 LF.	YES, CREDIT FOR EX. TREES TO REMAIN 280 LF.	
NUMBER OF PLANTS REQUIRED	5 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	11 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
CREDIT FOR EXISTING VEGETATION	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	5 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	6 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	11 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES

MD DNR QUALIFIED PROFESSIONAL

DATE: 9/30/13

OWNER

REUMER ENTERPRISES, LLC.
R/E GROUP, INC.
3000 MAIN STREET
ELICOTT CITY, MD 21043



VICINITY MAP

SCALE: 1"=1000'

GENERAL NOTES:

1. SITE DATA:
 - ZONING: R-20.
 - TAX MAP 31 PARCEL 286 GRID 9.
 - DEED REFERENCE: 6863/313
 - GROSS AREA: 3,007 ACRES ±
 - MINIMUM LOT SIZE: 24,242 SQ. FT.
 - NUMBER OF PROPOSED BUILDABLE LOTS: 1
 - NUMBER OF PROPOSED OPEN SPACE LOTS: 1
 - NUMBER OF BULK PARCELS: 1
 - AREA OF PROPOSED OPEN SPACE: 2.97 X 6% = 0.18 AC ±
 - AREA OF PROPOSED OPEN SPACE: 43,558 SF = 1.00 AC ±
2. THIS BOUNDARY IS BASED ON A FIELD MONUMENTED BOUNDARY SURVEY DONE BY MILDBERG BOENDER AND ASSOCIATES ON OR ABOUT FEB. 2003.
3. THE COORDINATES SHOWN HEREON ARE BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 421A AND 421B STATION NO. 31AA N 573,988.5709 ELEVATION 500.157 E 1,369,934.229 STATION NO. 31DA N 571,982.6701 ELEVATION 482.35 E 1,372,145.075
4. ALL EXISTING STRUCTURES ON SITE WILL BE REMOVED.
5. THIS SUBDIVISION IS SUBJECT TO THE 5TH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS AS AMENDED UNDER COUNCIL BILL # 50-2001.
6. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED.
7. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR A NEW DWELLING TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENT).
 - B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
 - C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT RADIUS.
 - D) STRUCTURES (CULVERT/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (M25 LOADING).
 - E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
8. WETLAND & FOREST STAND DELINEATIONS PREPARED BY MILDBERG, BOENDER, & ASSOCIATES, INC. ON OR ABOUT MARCH 2003.
9. SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED JULY 1968, SHEET 21.
10. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY REFORESTATION OF 1.00 ACRE AND PAYMENT OF FEE-IN-LIEU OF REFORESTATION FOR 0.11 ACRES (4,791.6 SQ. FT.) IN THE AMOUNT \$2,395.80. FINANCIAL SURETY FOR THE ON-SITE REFORESTATION OF 1.00 ACRE (43,560 SQ. FT.) WILL BE POSTED AS PART OF THE DEVELOPERS AGREEMENT IN THE AMOUNT OF \$21,780.00.
11. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL. IN ADDITION, NO SUBSTITUTIONS OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
12. AN ASIDE PERMIT IS REQUIRED PRIOR TO REMOVAL OF THE DRIVEWAY AND CULVERTS. THE PERMIT SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WORK.
13. LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING ON LOTS 1 THRU 4 (11 SHADE TREES) IS DEFERRED UNTIL SITE DEVELOPMENT PLAN STAGE.

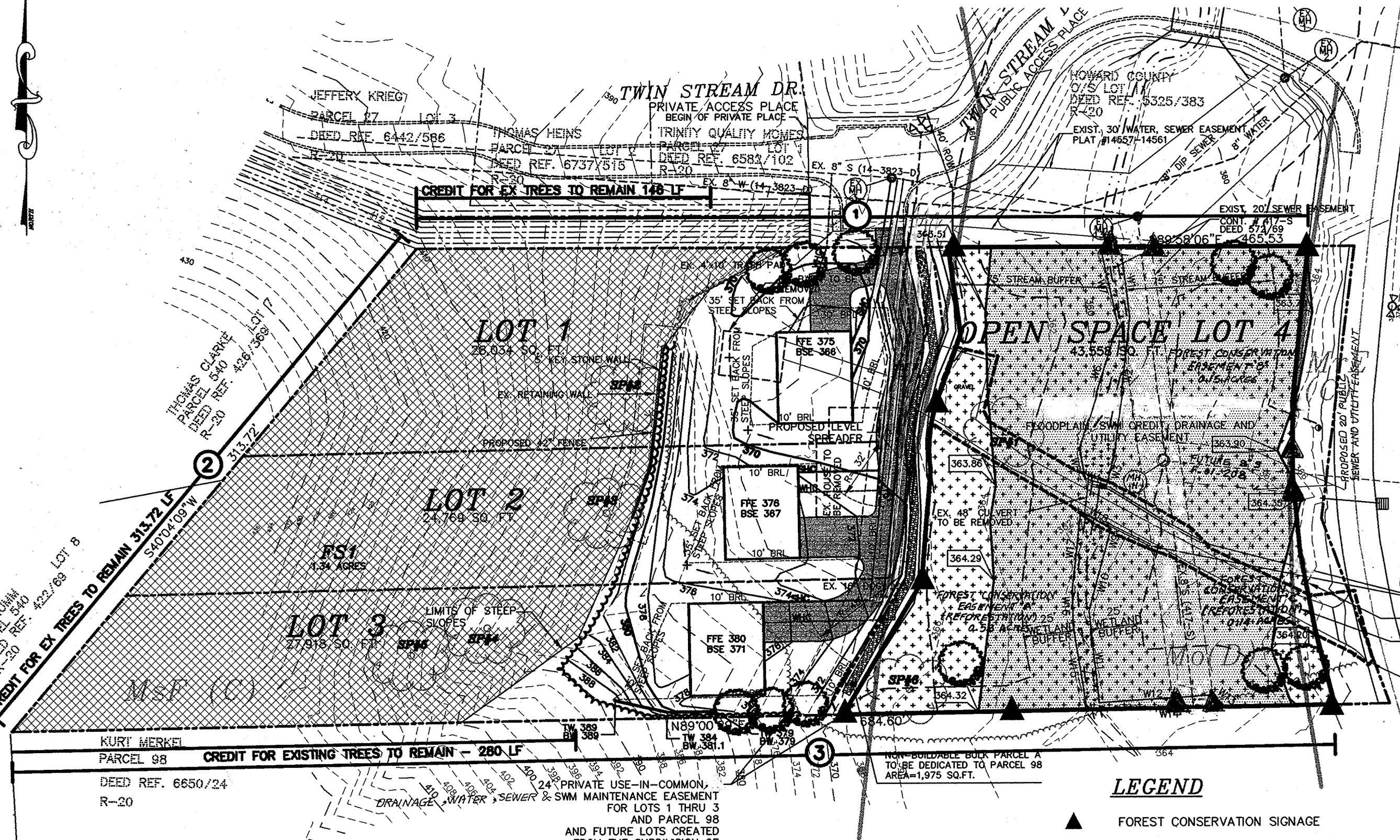
Project	date	description	revisions
02-104	MARCH 03	engineering	
02-104	MARCH 03	illustration	
02-104	MARCH 03	scale	
02-104	MARCH 03	approval	

Project	date	description	revisions
02-104	MARCH 03	engineering	
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FINCHAM PROPERTY
PARCEL 286
TAX MAP 31
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOREST CONSERVATION, LANDSCAPE, & SUPPLEMENTAL PLAN

MILDBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 621-5521

1 OF 1



BONNIELASS LLC
PARCEL 254
DEED REF. 5225/685
R-20

BENJAMIN VESTER JR
PARCEL 246
DEED REF. 491/73
R-20

FOREST CONSERVATION DATA

FOREST CONSERVATION WORKSHEET

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C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	= 0.00
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LAND USE CATEGORY:

ARA	MOR	IDA	HDR	MPD	CIA
0	0	0	1	0	0

E. AFFORESTATION THRESHOLD.....15% X D = 0.33
F. CONSERVATION THRESHOLD.....20% X D = 0.44

EXISTING FOREST COVER:

G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN)	= 1.34
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD	= 1.01
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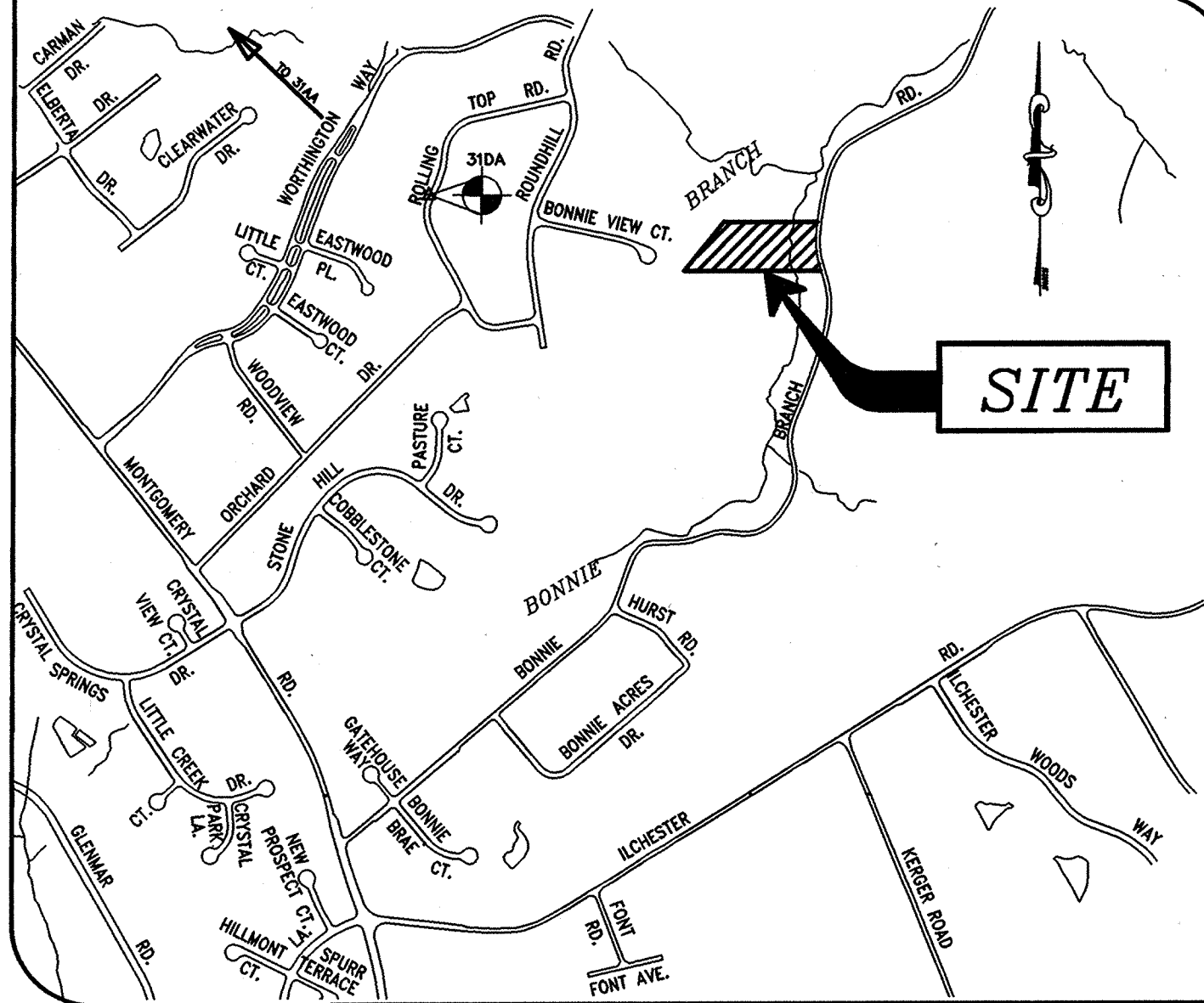
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PLANTING REQUIREMENTS:

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 - A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENT).
 - B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
 - C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT RADIUS.
 - D) STRUCTURES (CULVERTS/BROOKS) CAPABLE OF SUPPORTING 25 TONS (H2S LOADING).
 - E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- WETLAND & FOREST STAND DELINEATIONS PREPARED BY MILDENBERG, BOENDER, & ASSOCIATES, INC. ON OR ABOUT MARCH 2003.
- SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED JULY 1968, SHEET 21.
- THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY REFORESTATION OF 0.87 ACRES AND PAYMENT OF FEE-IN-LIEU OF REFORESTATION FOR 0.87 ACRES (0.87 X \$227.20) IN THE AMOUNT \$197.25. FINANCIAL SURETY FOR THE ON-SITE REFORESTATION OF 0.87 ACRES (\$197,250.00, FT.) WILL BE POSTED AS PART OF THE DEVELOPERS AGREEMENT IN THE AMOUNT OF \$197,250.00.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING ON LOTS 1 THRU 4 (11 SHADE TREES) IS DEFERRED UNTIL SITE DEVELOPMENT PLAN STAGE.
- UPON SUBDIVISION OF PARCEL 286, THE NEW LOTS WILL UTILIZE THE USE-IN-COMMON ACCESS EASEMENT WHICH SERVES LOTS 1-3. THE STORM WATER MANAGEMENT FEATURE LOCATED WITHIN BULK-BUILDABLE PARCEL 1A MAY NOT BE REMOVED.

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
11		ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
TOTAL				11 SHADE TREES

SCHEDULE A : PERIMETER LANDSCAPED EDGE

CATEGORY	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	TOTAL
LANDSCAPE TYPE	442.69 LF	313.72 LF	657.08 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, CREDIT FOR EX. TREES TO REMAIN 146 LF.	YES, CREDIT FOR EX. TREES TO REMAIN 313.72 LF.	YES, CREDIT FOR EX. TREES TO REMAIN 280 LF.	
NUMBER OF PLANTS REQUIRED	5 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	11 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
CREDIT FOR EXISTING VEGETATION	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	5 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	6 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	11 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES

MD DNR QUALIFIED PROFESSIONAL

Stephanie Demchik 9/30/03
STEPHANIE DEMCHIK, P.L.A. NO. 3038

OWNER

REWER ENTERPRISES, LLC.
R/E GROUP, Inc.
8000 MAIN STREET
ELLICOTT CITY, MD 21043

FOREST STAND

FS1 - TULIP POPLAR ASSOCIATION

PLANTING SPECIFICATIONS AND NOTES

SITE PREPARATION AND SOILS

- PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS, IF NECESSARY.
- DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
- SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
- SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
- ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

- FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
- FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
- PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
- UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.

PLANT INSTALLATION

- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
- PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
- CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.

DEVELOPER'S/OWNER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE IN ACCORDANCE TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature] 9/14/03
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 10/10/03
DATE

[Signature] 10/10/03
DATE

- CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS ENIRCLE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED.
- U-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
- FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
- FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
- AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
- NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

FERTILIZING

- DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
- NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
- IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

- ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD
- ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
- VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.
- REMOVE THICK MATS OF WEEDS (SPRUBING, PULLING, CUTTING)
- AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
- REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
- A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

SUPERVISION

ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER "QUALIFIED PROFESSIONAL" AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.19.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.

MINIMUM LOT SIZE CHART

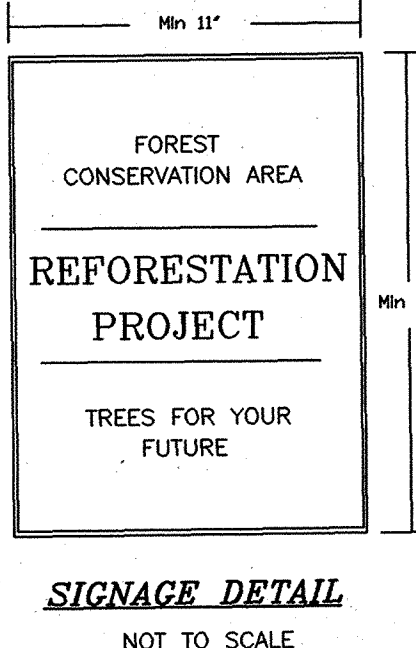
LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	24,769 SQ.FT.	796 SQ.FT.	23,973 SQ.FT.
3	27,918 SQ.FT.	1,341 SQ.FT.	26,577 SQ.FT.

SOILS CLASSIFICATION:

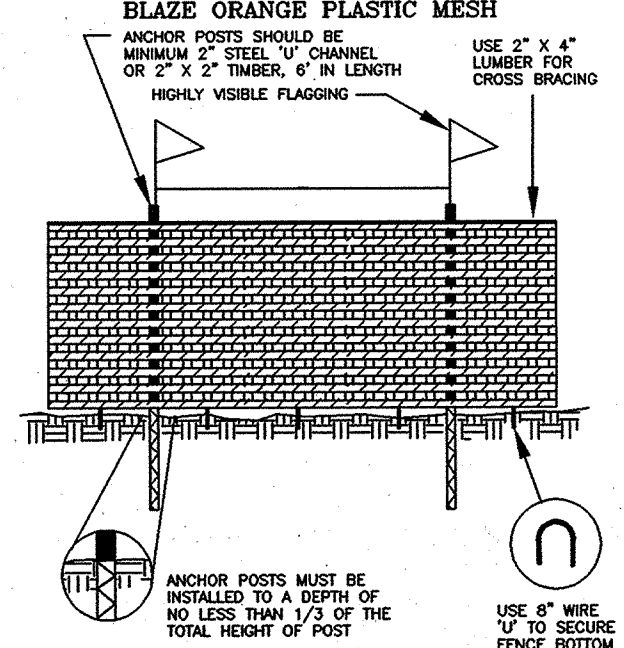
M: (D) MIXED ALLUVIAL LAND
Mf: (C) MONTALO AND RELAY SOILS, 15 TO 45 PERCENT SLOPES
MsF: (C) MONTALO AND RELAY VERY STONEY SILT LOAMS, 25 TO 60 PERCENT SLOPES

LEGEND

- ▲ FOREST CONSERVATION SIGNAGE
- FOREST CONSERVATION EASEMENT
- EX. PUBLIC 100 YEAR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT
- PROPOSED PAVING
- WETLANDS

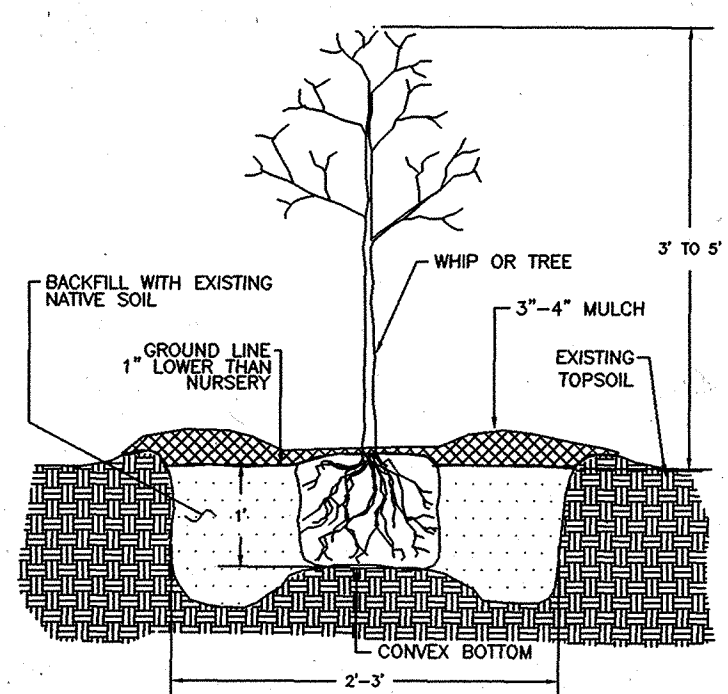


PROTECTIVE FENCE DETAIL



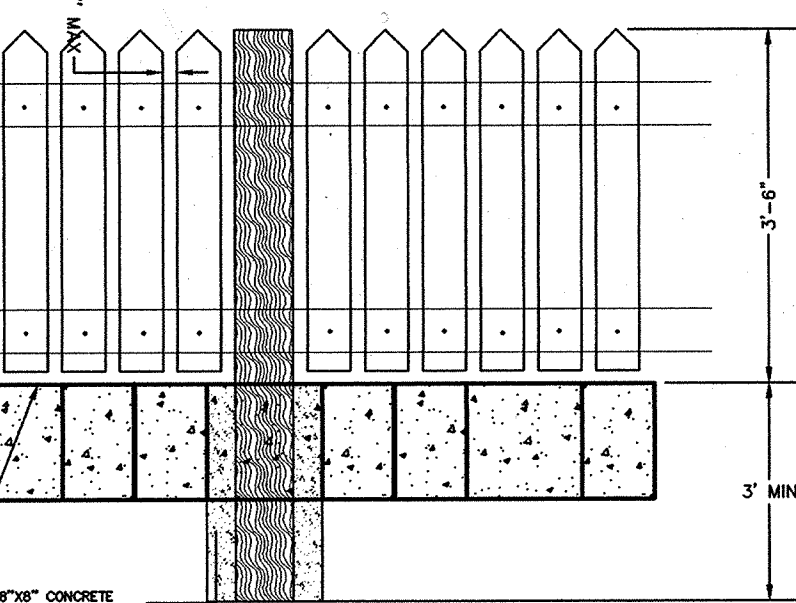
WETLAND TABLE

LINE	LENGTH	BEARING
W1	35.38	N06°54'10"W
W2	69.41	N06°28'36"E
W3	15.30	N15°16'00"E
W4	11.04	S72°18'40"E
W5	15.28	S10°08'35"E
W6	64.81	S17°04'19"W
W7	39.44	S12°23'53"E
W8	10.25	S89°58'06"E
W9	12.03	S15°11'13"W
W10	30.33	S14°58'12"W
W11	46.36	S06°14'27"E
W12	56.64	S86°17'22"W
W13	8.35	S46°01'04"E
W14	68.72	S89°00'29"W
W15	43.45	N09°07'14"W
W16	17.89	N00°43'00"W
W17	38.49	N06°18'53"E
W18	17.37	S59°48'03"E



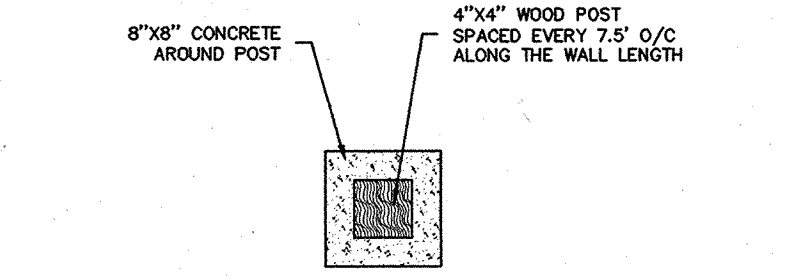
TREE PLANTING DETAIL

CONTAINER GROWN



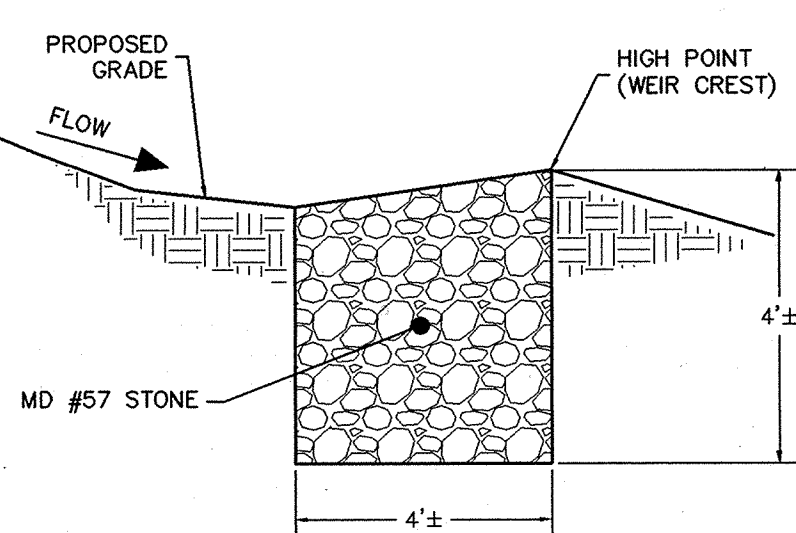
FENCE PROFILE (TYP.)

SCALE: NONE



WOOD POST PLAN

SCALE: NONE



LEVEL SPREADER DETAIL

NTS

SPECIMEN TREES

KEY	SPECIES
ST#1	45" SYCAMORE
ST#2	34" POPLAR
ST#3	31" POPLAR
ST#4	30" POPLAR
ST#5	40" POPLAR
ST#6	42" RED MAPLE

Project	date	revision
02-104	MARCH 03	1
illustration	engineering	approval
MLS	ENG	SAA
scale	1"=60'	

Project	date	revision
02-104	3/19/04	1
illustration	engineering	approval
MLS	ENG	SAA
scale	1"=60'	

FINCHAM PROPERTY
PARCEL 286
TAX MAP 31
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOREST CONSERVATION, LANDSCAPE, & SUPPLEMENTAL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
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(410) 997-0296 Fax: (301) 621-5521 Wash. (410) 997-0298 Fax

F-03-161